

# **PART 70 OPERATING PERMIT OFFICE OF AIR MANAGEMENT**

**Exide Corporation - Battery Separator Division  
3430 Cline Road  
Corydon, Indiana 47112-8706**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T061-5983-00012	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date:

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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The Permittee owns and operates a stationary battery separator manufacturer.

Responsible Official: Robert D. Hutchinson  
Source Address: 3430 Cline Road, Corydon, Indiana 47112-8706  
Mailing Address: 3430 Cline Road, Corydon, Indiana 47112-8706  
SIC Code: 3089  
County Location: Harrison  
County Status: Attainment for all criteria pollutants  
Source Status: Part 70 Permit Program  
Major Source, under PSD;  
Major Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

- (a) Sub-Micro (SM) Line 3, installed in 1979, and Sub-Micro (SM) Line 4, installed in 1984, consist of the following equipment:
- (1) Four (4) silos, identified as Unit ID #'s 4.1-4.4, used to store either polyethylene or silica, each with a maximum storage capacity of 168, 168, 75, and 75 tons, respectively, each utilizing a bin filter (Unit ID #'s 4.1-4.4) for particulate matter control, each exhausting through one (1) stack, identified as S/V ID #'s 4, 5, 6, and 7, respectively;
  - (2) Two (2) day bins, identified as Unit ID #'s 6.1 and 6.2, used to store silica and polyethylene, respectively, each with a maximum storage capacity of 2.4 and 0.125 tons, respectively, each utilizing a bin filter (Unit ID #'s 6.1 and 6.2) for particulate matter control, each exhausting through one (1) stack, identified as S/V ID #'s 10 and 11, respectively;
  - (3) One (1) silo dense phase transporter, identified as Unit ID #3.1, constructed in 1979, used to convey polyethylene and silica from rail cars to silo #'s 4.1-4.5, utilizing a bin filter (Unit ID # 3.1) for particulate control, exhausting through one (1) stack, identified as S/V ID #3;
  - (4) One (1) silica transporter, identified as Unit ID # 5.1, constructed in 1979, used to convey silica from silos 4.3, 4.4, and 4.5 to silica day bin # 6.1, utilizing a bin filter (Unit # 5.1) for particulate matter control, each exhausting through one (1) stack, identified as S/V ID # 9;

- (5) Two (2) oil extraction systems, identified as Unit ID #'s 9.1 and 9.2, each system includes oil extraction pans, a solvent drying oven, a water drying oven, and a distillation unit, utilizing a carbon adsorber to control volatile organic compounds and trichloroethylene, exhausting through one (1) stack, identified as S/V ID # 17;
- (6) Three (3) tanks, identified as Unit ID #'s 11.1, 11.2, and 11.3, each constructed in 1979, each used to store trichloroethylene, miscella and process oil, respectively, each with a maximum storage capacity of 10,576 gallons, each utilizing a carbon adsorber to control volatile organic compounds and trichloroethylene, exhausting through one (1) stack, identified as S/V ID #17;
- (7) Two (2) extruders, identified as Unit ID #'s 8.1 and 8.2;
- (8) Two (2) aerosol addition systems, identified as Unit ID #'s 10.1, 10.2;
- (b) Sub-Micro (SM) Line 6, installed in 1991, consists of the following equipment:
  - (1) One (1) silo, identified as Unit ID # 4.5, used to store silica, with a maximum storage capacity of 75 tons, utilizing a bin filter (Unit ID # 4.5) for particulate matter control, exhausting through one (1) stack, identified as S/V ID # 8;
  - (2) Two (2) day bins, identified as Unit ID #'s 7.1 and 7.2, used to store silica and polyethylene, respectively, each with a maximum storage capacity of 2.4 and 0.125 tons, respectively, each utilizing a bin filter (Unit ID #'s 7.1 and 7.2) for particulate matter control, each exhausting through one (1) stack, identified as S/V ID #'s 12 and 13, respectively;
  - (3) One (1) oil extraction system, identified as Unit ID # 9.3, system includes oil extraction pans, a solvent drying oven, a water drying oven, and a distillation unit, utilizing a carbon adsorber to control volatile organic compounds and trichloroethylene, exhausting through one (1) stack, identified as S/V ID # 17;
  - (4) Three (3) tanks, identified as Unit ID #'s 11.4, 11.5, and 11.6, each constructed in 1991, each used to store trichloroethylene, miscella and process oil, respectively, each with a maximum storage capacity of 9,989 gallons, each utilizing a carbon adsorber to control volatile organic compounds and trichloroethylene, exhausting through one (1) stack, identified as S/V ID #17;
  - (5) One (1) extruder, identified as Unit ID # 8.3;
  - (6) One (1) aerosol addition system, identified as Unit ID # 10.3;
- (c) Two (2) boilers, identified as Unit ID #'s 1.1 and 2.1, constructed in 1979 and 1991, respectively, each with a maximum heat input capacity of 12.553 and 20.922 MMBtu per hour, respectively, each combusting natural gas or No. 2 fuel oil, each exhausting through one (1) stack, identified as S/V ID #'s 1 and 2, respectively; and
- (d) One (1) tank, identified as Unit #11.7, constructed in 1991, used to store virgin oil, with a maximum storage capacity of 14,384 gallons.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]  
[326 IAC 2-7-5(15)]

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This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1 (21) that have applicable requirements.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).



B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

- ## B.2 Definitions [326 IAC 2-7-1]

B.3 Permit Term [326 IAC 2-7-5(2)]

B.4 Enforceability [326 IAC 2-7-7(a)]

- ## B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

## B.6 Severability [326 IAC 2-7-5(5)]

**B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]**

B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

- Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAM copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

**B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]**

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- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; or
  - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]**

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- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

**B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]**

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- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was based on continuous or intermittent data;
  - (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
  - (5) Any insignificant activity that has been added without a permit revision; and
  - (6) Such other facts, as specified in Sections D of this permit, as IDEM, OAM may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]  
[326 IAC 1-6-3]

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:
    - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
    - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
    - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM.

**B.13 Emergency Provisions [326 IAC 2-7-16]**

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- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Management,  
Compliance Section), or  
Telephone Number: 317-233-5674 (ask for Compliance Section)  
Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

**B.14 Permit Shield [326 IAC 2-7-15]**

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- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:
  - (1) The applicable requirements are included and specifically identified in this permit; or
  - (2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM has issued the modification. [326 IAC 2-7-12(b)(8)]

**B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]**

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Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

**B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]**

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- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) An emergency as defined in 326 IAC 2-7-1(12); or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

**B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination  
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]**

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM determines any of the following:

- (1) That this permit contains a material mistake.
- (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
- (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAM to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

**B.18 Permit Renewal [326 IAC 2-7-4]**

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due. [326 IAC 2-5-3]
  - (2) If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.



- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]  
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAM, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]  
If IDEM, OAM fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

**B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]**

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- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
  
Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

**B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]**

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- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

**B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]**

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The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

- (a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- (b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

**B.22 Operational Flexibility [326 IAC 2-7-20]**

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAM, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
  - (1) A brief description of the change within the source;

- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAM, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

**B.23 Construction Permit Requirement [326 IAC 2]**

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Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

**B.24 Inspection and Entry [326 IAC 2-7-6(2)]**

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Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.  
[326 IAC 2-7-6(6)]

- (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
- (2) The Permittee, and IDEM, OAM acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

**B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]**

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Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) IDEM, OAM shall reserve the right to issue a new permit.

**B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]**

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- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source
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### Emission Limitations and Standards [326 IAC 2-7-5(1)]

- C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]  
Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- C.2 Opacity [326 IAC 5-1]  
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:
- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period, as determined in 326 IAC 5-1-4.
  - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]  
The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.
- C.4 Incineration [326 IAC 4-2][326 IAC 9-1-2]  
The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.
- C.5 Fugitive Dust Emissions [326 IAC 6-4]  
The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.
- C.6 Operation of Equipment [326 IAC 2-7-6(6)]  
All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.
- C.7 Stack Height [326 IAC 1-7]  
The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

**C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]**

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- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

## **Testing Requirements [326 IAC 2-7-6(1)]**

### **C.9 Performance Testing [326 IAC 3-6]**

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## **Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**

### **C.10 Compliance Schedule [326 IAC 2-7-6(3)]**

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The Permittee:

- (a) Has certified that all facilities at this source are in compliance with all applicable requirements; and
- (b) Has submitted a statement that the Permittee will continue to comply with such requirements; and
- (c) Will comply with such applicable requirements that become effective during the term of this permit.

### **C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

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Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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**C.12 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]**

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

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**C.13 Monitoring Methods [326 IAC 3]**

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

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**C.14 Pressure Gauge Specifications**

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.

**Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

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**C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.



- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
  - (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
  - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
  - (3) A verification to IDEM, OAM that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAM that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.17 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

- (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
  - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
  - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

C.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

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- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
  - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due.

C.20 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;

- (3) All calibration and maintenance records;
- (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-Annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## **Stratospheric Ozone Protection**

### **C.23 Compliance with 40 CFR 82 and 326 IAC 22-1**

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Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

## SECTION D.1 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (a) Sub-Micro (SM) Line 3 , installed in 1979, and Sub-Micro (SM) Line 4, installed in 1984, consist of the following equipment:
  - (1) Two (2) oil extraction systems, identified as Unit ID #'s 9.1 and 9.2, each system includes oil extraction pans, a solvent drying oven, a water drying oven, and a distillation unit, utilizing a carbon adsorber to control volatile organic compounds and trichloroethylene, exhausting through one (1) stack, identified as S/V ID # 17;
  - (2) Two (2) extruders, identified as Unit ID #'s 8.1 and 8.2;
  - (3) Two (2) aerosol addition systems, identified as Unit ID #'s 10.1, 10.2;
- (b) Sub-Micro (SM) Line 6, installed in 1991, consists of the following equipment:
  - (1) One (1) oil extraction system, identified as Unit ID # 9.3, system includes oil extraction pans, a solvent drying oven, a water drying oven, and a distillation unit, utilizing a carbon adsorber to control volatile organic compounds and trichloroethylene, exhausting through one (1) stack, identified as S/V ID # 17;
  - (2) One (1) extruder, identified as Unit ID # 8.3; and
  - (3) One (1) aerosol addition system, identified as Unit ID # 10.3.

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 BACT Analysis [326 IAC 8-1-6]

Pursuant to CP-061-1935-00012, issued on December 21, 1990, a carbon adsorption unit with 95% control efficiency has been determined by OAM to be the Best Available Control Technology for SM-3, SM-4, and SM-6. The control system shall be operated at all times that extruders for SM-3, SM-4, and SM-6; oil extraction systems for SM-3, SM-4, and SM-6; aerosol addition systems for SM-3, SM-4, and SM-6; and tanks (ID #'s 11.1 through 11.6) are used. For the purpose of determining compliance, the overall control efficiency of the control system shall be considered to be 95% provided the carbon adsorption unit is operating in compliance with the monitoring provisions specified in Condition D.1.5.

#### D.1.2 MACT Applicability [40 CFR Part 63.460, Subpart T]

The source is not subject to the requirements of National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR Part 63.460, Subpart T). The trichloroethylene used at the source is not used as a halogenated solvent cleaner.

#### D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

## **Compliance Determination Requirements**

### **D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]**

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform VOC testing according to 326 IAC 3-6 (Source Sampling Procedures) using the methods specified in the rule or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

### **D.1.5 Volatile Organic Compounds (VOC)**

The carbon adsorption unit for VOC control shall be in operation at all times when the extruders for SM-3, SM-4, and SM-6; oil extraction systems for SM-3, SM-4, and SM-6; aerosol addition systems for SM-3, SM-4, and SM-6; and tanks (ID #'s 11.1 through 11.6) are in operation.

## **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

### **D.1.6 Carbon Adsorbers**

At all times that the control system for the extruders for SM-3, SM-4, and SM-6; oil extraction systems for SM-3, SM-4, and SM-6; aerosol addition systems for SM-3, SM-4, and SM-6; and tanks (ID #'s 11.1 through 11.6) are in operation and being utilized to demonstrate compliance with the limitations set forth in Condition D.1.1, the carbon beds shall be regenerated twice per month, or on a schedule based on the manufacturer's recommendations and in-situ efficiency testing performed by the permittee.

### **D.1.7 Carbon Adsorption Unit Inspections**

An inspection shall be performed each calendar quarter of the carbon adsorption unit controlling the extruders for SM-3, SM-4, and SM-6; oil extraction systems for SM-3, SM-4, and SM-6; aerosol addition systems for SM-3, SM-4, and SM-6; and tanks (ID #'s 11.1 through 11.6). All defective beds shall be replaced.

### **D.1.8 Carbon Adsorption Failure Detection**

In the event that a failure on the carbon adsorber has been observed:

- (a) For the carbon adsorber, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.
- (b) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.

## **Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

### **D.1.9 Record Keeping Requirements**

- (a) To document compliance with Conditions D.1.1 and D.1.6, the Permittee shall maintain records in accordance with (1). Records maintained for (1) shall be taken once monthly and shall be complete and sufficient to establish compliance with the VOC control efficiency established in Condition D.1.1 and schedule established in Condition D.1.6.

- (1) Scheduled time when the carbon beds regeneration shall be performed.



- (b) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.2

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (a) Sub-Micro (SM) Line 3 , installed in 1979, and Sub-Micro (SM) Line 4, installed in 1984, consist of the following equipment:
- (1) Four (4) silos, identified as Unit ID #'s 4.1-4.4, used to store either polyethylene or silica, each with a maximum storage capacity of 168, 168, 75, and 75 tons, respectively, each utilizing a bin filter (Unit ID #'s 4.1-4.4) for particulate matter control, each exhausting through one (1) stack, identified as S/V ID #'s 4, 5, 6, and 7, respectively;
  - (2) Two (2) day bins, identified as Unit ID #'s 6.1 and 6.2, used to store silica and polyethylene, respectively, each with a maximum storage capacity of 2.4 and 0.125 tons, respectively, each utilizing a bin filter (Unit ID #'s 6.1 and 6.2) for particulate matter control, each exhausting through one (1) stack, identified as S/V ID #'s 10 and 11, respectively;
  - (3) One (1) silo dense phase transporter, identified as Unit ID #3.1, constructed in 1979, used to convey polyethylene and silica from rail cars to silo #'s 4.1-4.5, utilizing a bin filter (Unit ID # 3.1) for particulate control, exhausting through one (1) stack, identified as S/V ID # 3;
  - (4) One (1) silica transporter, identified as Unit ID # 5.1, constructed in 1979, used to convey silica from silos 4.3, 4.4, and 4.5 to silica day bin #'s 6.1 and 6.2, utilizing a bin filter (Unit # 5.1) for particulate matter control, each exhausting through one (1) stack, identified as S/V ID # 9;
- (b) Sub-Micro (SM) Line 6, installed in 1991, consists of the following equipment:
- (1) One (1) silo, identified as Unit ID # 4.5, used to store silica, with a maximum storage capacity of 75 tons, utilizing a bin filter (Unit ID # 4.5) for particulate matter control, exhausting through one (1) stack, identified as S/V ID # 8; and
  - (2) Two (2) day bins, identified as Unit ID #'s 7.1 and 7.2, used to store silica and polyethylene, respectively, each with a maximum storage capacity of 2.4 and 0.125 tons, respectively, each utilizing a bin filter (Unit ID #'s 7.1 and 7.2) for particulate matter control, each exhausting through one (1) stack, identified as S/V ID #'s 12 and 13, respectively.

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the five (5) silos, four (4) day bins, and two (2) transporters shall not exceed the following pounds per hour when operating at the following appropriate process weight rate in pounds per hour:

- (a) The allowable particulate matter emissions from the four (4) silos (ID #4.1 - 4.4), two (2) day bins (ID #6.1 and 6.2), the silo dense phase transporter and the SM 3/4 silica transporter for SM-3 and SM-4 shall not exceed 22.91 pounds per hour, when operating at a process weight rate of 26,080 pounds per hour.

- (b) Pursuant to CP-061-1935-00012, issued on December 21, 1990, the allowable particulate matter emissions from the one (1) silo (ID #4.5) and two (2) day bins (ID #7.1 and 7.2) for SM-6 shall not exceed 5.09 pounds per hour, when operating at a process weight rate of 2760 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

#### D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

### **Compliance Determination Requirements**

#### D.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.2.4 Particulate Matter (PM)

The bin filters for the five (5) silos and four (4) day bins, and the two (2) transporters for PM control shall be in operation at all times when are in operation and exhausting to the outside atmosphere.

### **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

#### D.2.5 Visible Emissions Notations

- (a) Daily visible emission notations of the five (5) silos, four (4) day bins, and two (2) transporters stack exhausts shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.2.6 Parametric Monitoring

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The Permittee shall record the total static pressure drops across the bin filters used in conjunction with the five (5) silos, four (4) day bins, and two (2) transporters, at least once weekly when the five (5) silos, four (4) day bins, and two (2) transporters are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the bin filters shall be maintained within the range of 1.0 and 7.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM and shall be calibrated at least once every six (6) months.

#### D.2.7 Broken or Failed Bag Detection

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In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses and bin filters, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

### **Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

#### D.2.8 Record Keeping Requirements

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- (a) To document compliance with Condition D.2.5, the Permittee shall maintain records of daily visible emission notations of the five (5) silos, four (4) day bins, and two (2) transporters stack exhaust.
- (b) To document compliance with Condition D.2.6, the Permittee shall maintain the following records as specifically related to the bin filters:
  - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event .

- (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
  - (8) Documentation of the dates vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.3 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

One (1) boiler, identified as Unit ID # 1.1, constructed in 1979, with a maximum heat input capacity of 12.553 MMBtu per hour, combusting natural gas or No. 2 fuel oil, exhausting through one (1) stack, identified as S/V ID # 1.

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.3.1 Particulate Matter Limitation (PM) [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3 (a) (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1 (b)), particulate emissions from Boiler #1, which was in operation on or before September 21, 1983, shall in no case exceed 0.6 pounds of particulate matter per million British thermal units heat input. This is based on the lower of 0.6 and the following formula:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

where: Pt = Pounds of particulate matter emitted per MMBtu heat input.

Q = Total source maximum operating capacity rating in MMBtu per hour.

### Compliance Determination Requirements

#### D.3.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.3.3 Visible Emissions Notations

- (a) Daily visible emission notations of Boiler #1 stack exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere when burning No. 2 fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.3.4 Record Keeping Requirements

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- (a) To document compliance with Condition D.3.3, the Permittee shall maintain records of daily visible emission notations of Boiler #1 stack exhaust when burning No. 2 fuel oil.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.3.5 Reporting Requirements

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The Natural Gas Fired Boiler Certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the certification form located at the end of this permit, or its equivalent within thirty (30) days after the end of the quarter being reported.

## SECTION D.4 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

One (1) boiler, identified as Unit ID # 2.1, constructed in 1991, with a maximum heat input capacity of 20.922 MMBtu per hour, combusting natural gas or No. 2 fuel oil, exhausting through one (1) stack, identified as S/V ID # 2.

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.4.1 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1 (c)), particulate emissions from Boiler #2, which was in operation on or after September 21, 1983, shall in no case exceed 0.44 pounds of particulate matter per million British thermal units heat input. The emission limit was determined using the following formula:

$$Pt = \frac{1.09}{Q^{0.26}} \quad \text{where: } Pt = \text{Pounds of particulate matter emitted per MMBtu heat input.}$$

Q = Total source maximum operating capacity rating in MMBtu per hour.

#### D.4.2 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1] [326 IAC 12-1]

Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations) and 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units):

- (a) The SO<sub>2</sub> emissions from the 20.922 MMBtu per hour oil-fueled boiler shall not exceed five tenths (0.5) pounds per million Btu heat input; or
- (b) The sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight. [40 CFR 60.42c(d)]

Pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur content limit applies at all times, including periods of startup, shutdown, and malfunction.

### Compliance Determination Requirements

#### D.4.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM and SO<sub>2</sub> limit specified in Condition D.4.1 and 4.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.4.4 Sulfur Dioxide Emissions and Sulfur Content

Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall demonstrate compliance utilizing one of the following options:

- (a) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
- (b) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.



- (1) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
- (2) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

#### **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

##### **D.4.5 Visible Emissions Notations**

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- (a) Daily visible emission notations of Boiler #2 stack exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere when burning No. 2 fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

##### **D.4.6 Record Keeping Requirements**

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- (a) To document compliance with Condition D.4.2, the Permittee shall maintain records in accordance with (1) through (6) below. Note that pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur limit applies at all times including periods of startup, shutdown, and malfunction.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
  - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; andIf the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:
  - (4) Fuel supplier certifications;
  - (5) The name of the fuel supplier; and
  - (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (b) To document compliance with Condition D.4.6, the Permittee shall maintain records of daily visible emission notations of Boiler #2 stack exhaust when burning No. 2 fuel oil.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.4.7 Reporting Requirements

The Natural Gas Fired Boiler Certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the certification form located at the end of this permit, or its equivalent within thirty (30) days after the end of the quarter being reported.

## **SECTION D.5 FACILITY OPERATION CONDITIONS**

### **Facility Description [326 IAC 2-7-5(15)]**

- (a) Three (3) tanks, identified as Unit ID #'s 11.1, 11.2, and 11.3, each constructed in 1979, each used to store trichloroethylene, miscella and process oil, respectively, each with a maximum storage capacity of 10,576 gallons, each utilizing a carbon adsorber to control volatile organic compounds and trichloroethylene, exhausting through one (1) stack, identified as S/V ID #17;
- (b) Three (3) tanks, identified as Unit ID #'s 11.4, 11.5, and 11.6, each constructed in 1991, each used to store trichloroethylene, miscella and process oil, respectively, each with a maximum storage capacity of 9,989 gallons, each utilizing a carbon adsorber to control volatile organic compounds and trichloroethylene, exhausting through one (1) stack, identified as S/V ID #17; and
- (c) One (1) tank, identified as Unit #11.7, constructed in 1991, used to store virgin oil, with a maximum storage capacity of 14,384 gallons.

### **Emission Limitations and Standards [326 IAC 2-7-5(1)]**

#### **D.5.1 Volatile Organic Liquid Storage Vessel [326 IAC 12][40 CFR 60.110, Subpart Kb]**

Pursuant to 40 CFR Part 60.110b, Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels), the virgin oil tank (Unit #11.7), with a with a design capacity of less than 75 cubic meters, is subject to 40 CFR Part 60.116b, paragraphs (a) through (c) which requires record keeping.

#### **D.5.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

### **Compliance Determination Requirements**

#### **D.5.3 Testing Requirements [326 IAC 2-8-5(1)]**

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the limit specified in Condition D.5.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

### **Compliance Monitoring Requirements**

#### **D.5.4 Daily Visible Checks for Liquid Leaks**

- (a) Daily checks for liquid leaks during loading into tanks containing trichloroethylene and miscella, (ID #'s 11.1, 11.2, 11.4, 11.5) and the virgin oil tank shall be performed once per day when the facility is in operation. A trained employee will record any visible liquid leaks and the date of such leaks.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, checks shall be taken during that part of the operation that would normally be expected to cause the greatest potential for liquid leaks.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of liquid leaks for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a liquid leak is observed.

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**D.5.5 Record Keeping Requirements [326 IAC 12]**

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- (a) To document compliance with Condition D.5.1, the Permittee shall maintain permanent records at the source in accordance with (1) and (2) below for the virgin oil tank (Unit # 11.7):
  - (1) The dimension of the storage vessel; and
  - (2) An analysis showing the capacity of the storage vessel;
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION  
  
PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Exide Corporation - Battery Separator Division  
Source Address: 3430 Cline Road, Corydon, Indiana, 47112-8706  
Mailing Address: 3430 Cline Road, Corydon, Indiana, 47112-8706  
Part 70 Permit No.: T-061-5983-00012

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION  
P.O. Box 6015  
100 North Senate Avenue  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT  
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Exide Corporation - Battery Separator Division  
Source Address: 3430 Cline Road, Corydon, Indiana, 47112-8706  
Mailing Address: 3430 Cline Road, Corydon, Indiana, 47112-8706  
Part 70 Permit No.: T-061-5983-00012

**This form consists of 2 pages**

**Page 1 of 2**

Check either No. 1 or No.2

- 9** 1. This is an emergency as defined in 326 IAC 2-7-1(12)  
C The Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and  
C The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
- 9** 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c)  
C The Permittee must submit notice in writing within ten (10) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency/Deviation:

Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT  
NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: Exide Corporation - Battery Separator Division  
Source Address: 3430 Cline Road, Corydon, Indiana, 47112-8706  
Mailing Address: 3430 Cline Road, Corydon, Indiana, 47112-8706  
Part 70 Permit No.: T-061-5983-00012

**This certification shall be included when submitting monitoring, testing reports/results  
or other documents as required by this permit.**

Report period

Beginning: \_\_\_\_\_

Ending: \_\_\_\_\_

Boiler Affected

Alternate Fuel

Days burning alternate fuel

From

To

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT  
SEMI-ANNUAL COMPLIANCE MONITORING REPORT**

Source Name: Exide Corporation - Battery Separator Division  
Source Address: 3430 Cline Road, Corydon, Indiana, 47112-8706  
Mailing Address: 3430 Cline Road, Corydon, Indiana, 47112-8706  
Part 70 Permit No.: T-061-5983-00012

**Months:** \_\_\_\_\_ **to** \_\_\_\_\_ **Year:** \_\_\_\_\_

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted semi-annually. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

**9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD**

**9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

<b>Compliance Monitoring Requirement</b> (e.g. Permit Condition D.1.6)	<b>Number of Deviations</b>	<b>Date of each Deviation</b>

Form Completed By: \_\_\_\_\_  
Title/Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management  
Office of Air Management**

Addendum to the  
Technical Support Document (TSD) for a Part 70 Operating Permit

**Source Background and Description**

<b>Source Name:</b>	<b>Exide Corporation - Battery Separator Division</b>
<b>Source Location:</b>	<b>3430 Cline Road, Corydon, Indiana 47112-8706</b>
<b>County:</b>	<b>Harrison</b>
<b>SIC Code:</b>	<b>3089</b>
<b>Operation Permit No.:</b>	<b>T061-5983-00012</b>
<b>Permit Reviewer:</b>	<b>Yvette de los Angeles/EVP</b>

On April 14, 1999, the Office of Air Management (OAM) had a notice published in the Corydon Democrat, Corydon, Indiana, stating that Exide Corporation - Battery Separator Division had applied for a Part 70 Operating Permit for the operation of a stationary battery separator manufacturer. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On May 3, 1999, Exide Corporation - Battery Separator Division submitted comments on the proposed Part 70 permit. The summary of the comments and corresponding responses are as follows (changes in bold or strikeout for emphasis):

**Comment 1:**

Condition B.14(b)(2) - This subcondition states that the Permit Shield applies to the extent that "The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable." The permit does not contain any such determinations of non-applicability, although the Technical Support Document does contain a review of the applicability or non-applicability of several rules. Exide understands that IDEM does not consider determinations of non-applicability that are made as a part of the Technical Support Document to be a determination that would qualify for the permit shield under the provisions of this condition. Exide has, on several occasions in the past, been asked to provide documentation on the reasons why Maximum Achievable Control Technology (MACT) standards for halogenated solvent cleaning (40 CFR 63, Subpart T) are not applicable to its operations. It is Exide's understanding that Federal and State regulators agree that these standards are not applicable to Exide's Corydon operation. In order to avoid potential confusion in the future, Exide requests that the draft permit be amended (under Condition B.14 or in Section D.1) to provide an explicit determination that 40 Part 63, Subpart T, does not apply to the Exide Corydon facility.

**Response 1:**

A condition will be added in Section D.1 to specify that halogenated solvent cleaning is not applicable to the source. Condition D.1.2 will be added as follows (all other conditions will be renumbered accordingly):

D.1.2 MACT Applicability [40 CFR Part 63.460, Subpart T]

The source is not subject to the requirements of National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR Part 63.460, Subpart T). The trichlorethylene used at the source is not used as a halogenated solvent cleaner.

**Comment 2:**

Condition D.1.3 - This condition contains a requirement for VOC testing on the exhaust from the carbon adsorption unit. Exide believes that the reference to "Method 24" as the test method for such testing is not correct, and should be revised.

**Response 2:**

Condition D.1.3 (now renumbered as Condition D.1.4) shall be modified as follows:

~~D.1.3~~ D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform VOC testing ~~utilizing Method 24 (40 CFR 60, Appendix A)~~ **according to 326 IAC 3-6 (Source Sampling Procedures) using the methods specified in the rule** or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

**Comment 3:**

Condition D.1.5(a) & (b) - These conditions establish a requirement to operate the carbon adsorption unit within the pressure drop range and above the temperature necessary to achieve an overall control efficiency of 95%. Exide has two concerns relating to this requirement, which are:

- |   |  |
|---|--|
| (a) ranges for after the operations provide that equipment, | (a) Exide has never operated pressure drop or temperature indicators on its carbon adsorption unit, and therefore does not have a history of normal operating these parameters. Since a stack test will not be required until 30 to 36 months Title V Permit is issued, Exide will have no basis on which to evaluate initial under its Title V Permit. Exide suggests that these conditions be amended to Exide will, within 90 days of beginning operation of necessary monitoring provide suggested ranges and values for these parameters based upon its initial experience with the monitors. |
| (b) requirement, in place                                   | (b) Exide is not aware of the manner in which the minimum operating temperature will influence carbon adsorption unit performance. Exide suggests deleting this and using pressure drop as the sole indicator that the carbon adsorption unit is and in operation.   |

### Response 3:

The OAM agrees to delete Condition D.1.5 (a), (b), and (c). OAM will adjust Condition D.1.5 (now renumbered as Condition D.1.6) as follows:

#### ~~D.1.5~~ **D.1.6** Carbon Adsorbers

---

At all times that the control system for the extruders for SM-3, SM-4, and SM-6; oil extraction systems for SM-3, SM-4, and SM-6; aerosol addition systems for SM-3, SM-4, and SM-6; and tanks (ID #'s 11.1 through 11.6) are in operation and being utilized to demonstrate compliance with the limitations set forth in Condition D.1.1, ~~the control system shall be operated such that~~ **the carbon beds shall be regenerated twice per month, or on a schedule based on the manufacturer's recommendations and in-situ efficiency testing performed by the permittee.**

- ~~(a) The pressure drop across the carbon adsorption unit shall not be less than the pressure drop required to achieve the overall control efficiency of 95%, or a more appropriate pressure drop as determined by the most recent stack test data.~~
- ~~(b) The carbon adsorption unit shall operate above the minimum operating temperature as determined by the most recent stack test data, which has been demonstrated to achieve the overall control efficiency of 95%.~~
- ~~(c) The sensors and recording equipment measuring the pressure drop and temperature are operating.~~

### Comment 4:

Condition D.1.7(a) - This condition related to requirements to remove equipment from service in the event of a failure of the control equipment. The first sentence uses the term "compartments," which seems to relate to baghouse collectors. Exide suggests deleting the first sentence of (a), as the second sentence relates to carbon adsorption shutdown:

### Response 4:

Condition D.1.7(a) (now renumbered as Condition D.1.8) shall be modified as follows:

#### ~~D.1.7~~ **D.1.8** Carbon Adsorption Failure Detection

---

In the event that a failure on the carbon adsorber has been observed:

- ~~(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced.~~ For the carbon adsorber, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

### Comment 5:

Condition D.1.8(a) - This condition relates to certain record keeping requirements. Exide has two concerns related to paragraph (a):

- (a) This condition states that records for temperature and pressure drop "shall be taken monthly and shall be complete and sufficient to establish compliance...." Exide assumes, based upon this wording, that it need only record one pressure drop or temperature reading per month. Exide would appreciate clarification of this issue.

- (b) This condition references "...VOC usage limits and/or the VOC emission limits established in Condition D.1.1..." Exide believes that Condition D.1.1 does not contain any VOC usage limits or VOC emission limit, other than control efficiency. Exide suggests that this phrase be replaced as follows: "...to establish compliance with the VOC control efficiency established in Condition D.1.1...."

**Response 5:**

The OAM has decided to remove record keeping for operating temperature and pressure drop readings. Also, a condition shall be added under D.1.9(a) to record the operation time before the carbon adsorption bed is changed. Condition D.1.8(a) (now renumbered as Condition D.1.9) shall be modified as follows:

**D.1.8 D.1.9 Record Keeping Requirements**

- (a) To document compliance with Conditions D.1.1 and ~~D.1.5~~ **D.1.6**, the Permittee shall maintain records in accordance with (1). Records maintained for (1) shall be taken **once monthly per shift** and shall be complete and sufficient to establish compliance with the VOC ~~usage limits and/or the VOC emission limits~~ **control efficiency** established in Condition D.1.1 and **schedule time** established in Condition ~~D.1.5~~ **D.1.6**.
- (1) ~~Operating temperature and pressure drops for the carbon adsorption units~~
- (1) **Scheduled time when the carbon beds regeneration shall be performed.**
- (b) To document compliance with Condition ~~D.1.6~~ **D.1.7**, the Permittee shall maintain records of the results of the inspections required under Condition ~~D.1.6~~ **D.1.7**.

**Comment 6:**

Section D.2 (Description) - This introductory section contains a description covered in Section D.2. This includes reference to two Dense Phase Transporters (Unit ID# 3.1 and 5.1) each with a baghouse for particulate control. These control units are more accurately described as "bin filters". Exide requests that this reference be revised in the description for Section D.2, as well as in Conditions D.2.4, D.2.6 and D.2.8.

**Response 6:**

Section D.2, Conditions D.2.4, D.2.6 and D.2.8, as well as Condition A.2 shall be modified as follows:

Facility Description [326 IAC 2-7-5(15)]

- (a) Sub-Micro (SM) Line 3 , installed in 1979, and Sub-Micro (SM) Line 4, installed in 1984, consist of the following equipment:
- (3) One (1) silo dense phase transporter, identified as Unit ID #3.1, constructed in 1979, used to convey polyethylene and silica from rail cars to silo #'s 4.1-4.5, utilizing a ~~baghouse~~ **bin filter** (Unit ID # 3.1) for particulate control, exhausting through one (1) stack, identified as S/V ID # 3;

- (4) One (1) silica transporter, identified as Unit ID # 5.1, constructed in 1979, used to convey silica from silos 4.3, 4.4, and 4.5 to silica day bin #'s 6.1 and 6.2, utilizing a ~~baghouse~~ **bin filter** (Unit # 5.1) for particulate matter control, each exhausting through one (1) stack, identified as S/V ID # 9;

#### D.2.4 Particulate Matter (PM)

---

The bin filters for the five (5) silos and four (4) day bins, ~~the baghouses for~~ **and** the two (2) transporters for PM control shall be in operation at all times when are in operation and exhausting to the outside atmosphere.

#### D.2.6 Parametric Monitoring

---

The Permittee shall record the total static pressure drops across the bin filters ~~and baghouses~~ used in conjunction with the five (5) silos, four (4) day bins, and two (2) transporters, at least once weekly when the five (5) silos, four (4) day bins, and two (2) transporters are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the bin filters ~~and baghouses~~ shall be maintained within the range of 1.0 and 7.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM and shall be calibrated at least once every six (6) months.

#### D.2.8 Record Keeping Requirements

---

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain records of daily visible emission notations of the five (5) silos, four (4) day bins, and two (2) transporters stack exhaust.
- (b) To document compliance with Condition D.2.6, the Permittee shall maintain the following records as specifically related to the bin filters ~~and baghouses~~:

#### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

---

This stationary source consists of the following emission units and pollution control devices:

- (a) Sub-Micro (SM) Line 3, installed in 1979, and Sub-Micro (SM) Line 4, installed in 1984, consist of the following equipment:
- (3) One (1) silo dense phase transporter, identified as Unit ID #3.1, constructed in 1979, used to convey polyethylene and silica from rail cars to silo #'s 4.1-4.5, utilizing a ~~baghouse~~ **bin filter** (Unit ID # 3.1) for particulate control, exhausting through one (1) stack, identified as S/V ID # 3;
- (4) One (1) silica transporter, identified as Unit ID # 5.1, constructed in 1979, used to convey silica from silos 4.3, 4.4, and 4.5 to silica day bin #'s 6.1 and 6.2, utilizing a ~~baghouse~~ **bin filter** (Unit # 5.1) for particulate matter control, each exhausting through one (1) stack, identified as S/V ID # 9;

**Comment 7:**

Condition D.2.1(a) - This condition establishes a particulate matter emission limit for emission units that are a part of SM-3 and SM-4. The limit is referenced as "...when operating at a process weight rate of 13.04 pounds per hour." The correct process weight rate is 13.04 tons per hour.

**Response 7:**

Condition D.2.1(a) shall be modified as follows:

**D.2.1 Particulate Matter (PM) [326 IAC 6-3]**

---

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the five (5) silos, four (4) day bins, and two (2) transporters shall not exceed the following pounds per hour when operating at the following appropriate process weight rate in ~~tons~~ **pounds** per hour:

- (a) The allowable particulate matter emissions from the four (4) silos (ID #4.1 - 4.4), two (2) day bins (ID #6.1 and 6.2), the silo dense phase transporter and the SM 3/4 silica transporter for SM-3 and SM-4 shall not exceed 22.91 pounds per hour, when operating at a process weight rate of ~~13.04~~ **26,080** pounds per hour.

**Comment 8:**

Condition D.2.1(b) - This condition establishes a particulate matter emission limit for emission units that are a part of SM-6. The limit is referenced as "...when operating at a process weight rate of 1.38 pounds per hour." The correct process weight rate is 1.38 tons per hour.

**Response 8:**

Condition D.2.1(b) shall be modified as follows:

**D.2.1 Particulate Matter (PM) [326 IAC 6-3]**

---

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the five (5) silos, four (4) day bins, and two (2) transporters shall not exceed the following pounds per hour when operating at the following appropriate process weight rate in ~~tons~~ **pounds** per hour:

- (b) Pursuant to CP-061-1935-00012, issued on December 21, 1990, the allowable particulate matter emissions from the one (1) silo (ID #4.5) and two (2) day bins (ID #7.1 and 7.2) for SM-6 shall not exceed 5.09 pounds per hour, when operating at a process weight rate of ~~1.38~~ **2760** pounds per hour.

**Comment 9:**

Condition D.2.2 - This condition establishes a requirement for a Preventative Maintenance Plan. This condition should be revised to read "...for these facilities and their control devices."

**Response 9:**

Condition D.2.2 shall be modified as follows:

**D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

---

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for ~~this facility and its control device~~ **these facilities and their control devices.**

**Comment 10:**

Condition D.3.3(a) - Exide requests that the language in this condition be clarified with the additional phrases as outlined below:

“...shall be performed once per day during normal daylight operations when exhausting to the atmosphere when burning No. 2 fuel oil.”

**Response 10:**

Condition D.3.3 shall be modified as follows:

**D.3.3 Visible Emissions Notations**

---

- (a) Daily visible emission notations of Boiler #1 stack exhaust shall be performed **once per day** during normal daylight operations when exhausting to the atmosphere when burning No. 2 fuel oil. A trained employee shall record whether emissions are normal or abnormal.

**Comment 11:**

Condition D.3.5 and Condition D.4.8 - This condition requires the submission of a Natural Gas Fired Boiler Certification, “...when submitting monitoring, testing reports/results or other documents as required by this permit...” As written, Exide would be required to submit a Natural Gas Fired Boiler Certification with any report filed with the agency, regardless of whether the submission related in any way to operation of the boiler. As an example, Condition B.16 would require that Exide submit a written report to IDEM if a deviation was noted on its carbon adsorption system. It does not make sense for the Natural Gas Fired Boiler Certification form to be included with such a submission. Exide requests that IDEM clarify the circumstances under which this form is to be submitted.

**Response 11:**

Conditions D.3.5 and D.4.8 shall be modified to clarify the submission of the Natural Gas Fired Boiler Certification:

**D.3.5 Reporting Requirements**

---

The Natural Gas Fired Boiler Certification shall be submitted ~~when submitting monitoring, testing reports/results or other documents as required by this permit~~ to the address listed in Section C - General Reporting Requirements, of this permit, using the certification form located at the end of this permit, or its equivalent **within thirty (30) days after the end of the quarter being reported.**



#### D.4.8 Reporting Requirements

---

The Natural Gas Fired Boiler Certification shall be submitted ~~when submitting monitoring, testing reports/results or other documents as required by this permit~~ to the address listed in Section C - General Reporting Requirements, of this permit, using the certification form located at the end of this permit, or its equivalent **within thirty (30) days after the end of the quarter being reported.**

#### Comment 12:

Condition D.4.3 - This condition requires a preventative maintenance plan for 20.9 MMBtu/hr boiler. Exide believes that this unit is below the levels at which Preventative Maintenance Plans are required, and requests that this condition be deleted.

#### Response 12:

Pursuant to 326 IAC 2-7-4(c)(9) (Permit Application), confirmation that the source maintains on-site a preventive maintenance plan as described in 326 IAC 1-6-3, must be included in the permit application. Pursuant to 326 IAC 2-7-5(13) (Permit Content), a provision that requires the source to do all of the following must be included in each Part 70 permit:

- 1) Maintain on-site the preventive maintenance plan as required under 326 IAC 2-7-4(c)(9);
- 2) Implement the preventive maintenance plan; and,
- 3) Forward to the department upon request the preventive maintenance plan.

The requirements in 326 IAC 1-6-1 and 326 IAC 1-6-3 specify that the requirement to maintain a Preventive Maintenance Plan is applicable to any facility that is required to obtain a permit under 326 IAC 2-1-2 (Registration) and 326 IAC 2-1-4 (Operating Permits). IDEM's compliance monitoring guidance states that a compliance monitoring plan is required only for:

- (a) the unit emits particulate matter, sulfur dioxide, or volatile organic compounds; and
- (b) the unit has existing applicable requirements; and
- (c) the unit is subject to a NSPS or NESHAP (for these units current requirements will satisfy as a compliance monitoring plan); or
- (d) the unit has a control device and the allowable emissions exceed 10 pounds per hour; or
- (e) the unit does not have a control device and has actual emissions exceeding 25 tons per year.

Since Boiler #2.1 does not have allowable emissions that exceed 10 pounds per hour and Boiler #2.1 does not have actual emissions that exceed 25 tons per year, the Preventative Maintenance Plan will be deleted as follows:

#### ~~D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]~~

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~~A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.~~

#### Comment 13:

Condition D.4.7(a)(3) - This condition requires a certification "...signed by the owner or operator..." related to certain fuel records. Exide requests clarification of whether the term "owner or operator" requires a certification by the responsible official or not.

**Response 13:**

In Condition D.4.7(a)(3), the term “owner or operator” does not require a certification by the responsible official.

**Comment 14:**

Condition D.5.2 - This condition requires a preventative maintenance plan for storage tanks. Exide believes that this unit is below the levels at which Preventative Maintenance Plans are required, and requests that this condition be deleted.

**Response 14:**

Pursuant to 326 IAC 2-7-4(c)(9) (Permit Application), confirmation that the source maintains on-site a preventive maintenance plan as described in 326 IAC 1-6-3, must be included in the permit application. Pursuant to 326 IAC 2-7-5(13) (Permit Content), a provision that requires the source to do all of the following must be included in each Part 70 permit:

- 1) Maintain on-site the preventive maintenance plan as required under 326 IAC 2-7-4(c)(9);
- 2) Implement the preventive maintenance plan; and,
- 3) Forward to the department upon request the preventive maintenance plan.

The requirements in 326 IAC 1-6-1 and 326 IAC 1-6-3 specify that the requirement to maintain a Preventive Maintenance Plan is applicable to any facility that is required to obtain a permit under 326 IAC 2-1-2 (Registration) and 326 IAC 2-1-4 (Operating Permits). IDEM's compliance monitoring guidance states that a compliance monitoring plan is required only for:

- (a) the unit emits particulate matter, sulfur dioxide, or volatile organic compounds; and
- (b) the unit has existing applicable requirements; and
- (c) the unit is subject to a NSPS or NESHAP; or
- (d) the unit has a control device and the allowable emissions exceed 10 pounds per hour; or
- (e) the unit does not have a control device and has actual emissions exceeding 25 tons per year.

The storage tanks emit volatile organic compounds, have control devices and the virgin oil tank is subject to NSPS. Therefore, a Preventative Maintenance Plan is required for these facilities. Condition D.5.2 shall be modified to include the control devices:

**D.5.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]**

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A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for ~~this facility~~ **these facilities and their control devices**.

**Comment 15:**

Technical Support Document (Page 7 of 11) - Under the heading “Federal Rule Applicability”, a summary of the applicability of certain Federal Rules to the Exide facility is discussed. Subsection (f) reads:

“The degreasers are not subject to National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63.460, Subpart T (National Emission Standards for Halogenated Solvent Cleaning). The source does not use any halogenated solvent cleaners.”

While Exide agrees that Subpart T is not applicable to its facility, there are two clarifications which must be made to the statement in (f). The first sentence references “degreasers” at this plant. Exide does not own or operate degreasers at the Corydon plant. The final sentence indicates that Exide does not use any “halogenated solvent cleaners”. Exide does use trichloroethylene in its operations, which is a halogenated solvent. Exide suggests that (f) be reworded to read:

“No emission units are subject to National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63.460, Subpart T (National Emission Standards for Halogenated Solvent Cleaning).”

**Response 15:**

The OAM prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Please note the following changes under **Federal Rule Applicability** (Page 7 of 11):

- (f) ~~The degreasers~~ **No emissions units** are not subject to National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63.460, Subpart T (National Emission Standards for Halogenated Solvent Cleaning). ~~The source does not use any halogenated solvent cleaners.~~

## **Indiana Department of Environmental Management Office of Air Management**

### **Technical Support Document (TSD) for a Part 70 Operating Permit**

#### **Source Background and Description**

**Source Name:** Exide Corporation - Battery Separator Division  
**Source Location:** 3430 Cline Road, Corydon, IN 47112-8706  
**County:** Harrison  
**SIC Code:** 3089  
**Operation Permit No.:** T061-5983-00012  
**Permit Reviewer:** Yvette de los Angeles/EVP

The Office of Air Management (OAM) has reviewed a Part 70 permit application from Exide Corporation - Battery Separator Division relating to the operation of a battery separator manufacturer.

#### **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (a) Sub-Micro (SM) Line 3 , installed in 1979, and Sub-Micro (SM) Line 4, installed in 1984, consist of the following equipment:
  - (1) Four (4) silos, identified as Unit ID #'s 4.1-4.4, used to store either polyethylene or silica, each with a maximum storage capacity of 168, 168, 75, and 75 tons, respectively, each utilizing a bin filter (Unit ID # 4.1-4.4) for particulate matter control, each exhausting through one (1) stack, identified as S/V ID # 4, 5, 6, and 7, respectively;
  - (2) Two (2) day bins, identified as Unit ID #'s 6.1 and 6.2, used to store silica and polyethylene, respectively, each with a maximum storage capacity of 2.4 and 0.125 tons, respectively, each utilizing a bin filter (Unit ID #'s 6.1 and 6.2) for particulate matter control, each exhausting through one (1) stack, identified as S/V ID # 10 and 11, respectively;
  - (3) One (1) silo dense phase transporter, identified as Unit ID #3.1, constructed in 1979, used to convey polyethylene and silica from rail cars to silo #'s 4.1-4.5, utilizing a baghouse (Unit ID # 3.1) for particulate control, exhausting through one (1) stack, identified as S/V ID #3;
  - (4) One (1) silica transporter, identified as Unit ID # 5.1, constructed in 1979, used to convey silica from silos 4.3, 4.4, and 4.5 to silica day bin # 6.1, utilizing a baghouse (Unit # 5.1) for particulate matter control, exhausting through one (1) stack, identified as S/V ID # 9;
  - (5) Two (2) oil extraction systems, identified as Unit ID #'s 9.1 and 9.2, each system includes oil extraction pans, a solvent drying oven, a water drying oven, and a distillation unit, utilizing a carbon adsorber to control volatile organic compounds and trichloroethylene, exhausting through one (1) stack, identified as S/V ID # 17;

- (6) Three (3) tanks, identified as Unit ID #'s 11.1, 11.2, and 11.3, each constructed in 1979, each used to store trichloroethylene, miscella and process oil, respectively, each with a maximum storage capacity of 10,576 gallons, each utilizing a carbon adsorber to control volatile organic compounds and trichloroethylene, exhausting through one (1) stack, identified as S/V ID #17;
- (b) Sub-Micro (SM) Line 6, installed in 1991, consists of the following equipment:
  - (1) One (1) silo, identified as Unit ID # 4.5, used to store silica, with a maximum storage capacity of 75 tons, utilizing a bin filter (Unit ID # 4.5) for particulate matter control, exhausting through one (1) stack, identified as S/V ID # 8;
  - (2) Two (2) day bins, identified as Unit ID #'s 7.1 and 7.2, used to store silica and polyethylene, respectively, each with a maximum storage capacity of 2.4 and 0.125 tons, respectively, each utilizing a bin filter (Unit ID #'s 7.1 and 7.2) for particulate matter control, each exhausting through one (1) stack, identified as S/V ID #'s 12 and 13, respectively;
  - (3) One (1) oil extraction system, identified as Unit ID # 9.3, system includes oil extraction pans, a solvent drying oven, a water drying oven, and a distillation unit, utilizing a carbon adsorber to control volatile organic compounds and trichloroethylene, exhausting through one (1) stack, identified as S/V ID # 17;
  - (4) Three (3) tanks, identified as Unit ID #'s 11.4, 11.5, and 11.6, each constructed in 1991, each used to store trichloroethylene, miscella and process oil, respectively, each with a maximum storage capacity of 9,989 gallons, each utilizing a carbon adsorber to control volatile organic compounds and trichloroethylene, exhausting through one (1) stack, identified as S/V ID #17;
  - (5) One (1) extruder, identified as Unit ID # 8.3;
- (c) Two (2) boilers, identified as Unit ID #'s 1.1 and 2.1, constructed in 1979 and 1991, respectively, each with a maximum heat input capacity of 12.553 and 20.922 million British thermal units (MMBtu) per hour, respectively, each combusting natural gas or No. 2 fuel oil, each exhausting through one (1) stack, identified as S/V ID #'s 1 and 2, respectively; and
- (d) One (1) tank, identified as Unit #11.7, constructed in 1991, used to store virgin oil, with a maximum storage capacity of 14,384 gallons.

#### **Unpermitted Emission Units and Pollution Control Equipment**

The source also consists of the following unpermitted facilities/units:

- (a) Two (2) extruders, identified as Unit ID #'s 8.1 and 8.2, from Sub-Micro Line 3/4; and
- (b) Three (3) aerosol addition systems, identified as Unit ID #'s 10.1, 10.2, and 10.3 from Sub-Micro Lines 3, 4, and 6.

#### **New Emission Units and Pollution Control Equipment Receiving Prior Approval**

There are no new facilities to be reviewed.

## Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units (Btu) per hour:
  - (1) Natural gas-fired space heaters;
- (b) Propane or liquified petroleum gas or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour:
  - (1) Propane and oil surge tanks;
- (c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6;
- (d) Wastewater treatment system;
- (e) Forced and induced draft cooling tower system not regulated under a NESHAP;
- (f) Replacement or repair of filters in air filtration equipment;
- (g) Heat exchanger cleaning and repair;
- (h) Trimmers that do not produce fugitive emissions and that are equipped with a dust collector or trim material recovery device such as a bag filter or cyclone;
- (i) Paved and unpaved roads with public access;
- (j) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment;
- (k) Blowdown for the following: compressor, pumps and cooling tower;
- (l) On-site fire and emergency response training approved by the department;
- (m) Stationary fire pumps;
- (n) Filter or coalescer media changeout;
- (o) A laboratory as defined by 326 IAC 2-7-1(20)(C); and
- (p) Other activities or categories not previously identified:
  - (1) SM 3/4 mixing tower; and
  - (2) SM 6 mixing tower.

## Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) OP-31-02-88-0055, issued on April 30, 1984;
- (b) OP-31-02-92-0065, issued on August 19, 1988;
- (c) OP-31-02-92-0066, issued on August 19, 1988;

- (d) CP-061-1935-00012, issued on December 21, 1990; and
- (e) CP-061-4290-00012, issued on March 8, 1996.

All conditions from previous approvals were incorporated into this Part 70 permit except the following:

- (a) CP-061-4290-00012, issued on March 8, 1996

Reason not incorporated: Sub-Micro (SM) Line 7 was never constructed.

### Enforcement Issue

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment Requiring ENSR*.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

### Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on May 31, 1996.

A notice of completeness letter was mailed to the source on February 18, 1997.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations (13 pages).

### Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential to Emit (tons/year)
PM	greater than 250
PM-10	greater than 250
SO <sub>2</sub>	less than 100
VOC	greater than 250
CO	less than 100
NO <sub>x</sub>	less than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential to Emit (tons/year)
Trichloroethylene (TCE)	greater than 10
TOTAL	greater than 25

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM-10 and VOC are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions  
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

### Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1997 OAM emission data.

Pollutant	Actual Emissions (tons/year)
PM	0.18
PM-10	0.18
SO <sub>2</sub>	0.04
VOC	0.16
CO	2.05
NO <sub>x</sub>	8.19
HAP (TCE)	NA

### Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)							
Process/facility	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	Worst Case Single HAPs	Worst Case Total HAPs
Boiler #1	1.30	1.30	22.30	0.10	2.00	7.90	0.00	0.00
Boiler #2	2.20	2.20	37.20	0.20	3.30	13.10	0.00	0.00



Process/facility	Limited Potential to Emit (tons/year)							
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	Worst Case Single HAPs	Worst Case Total HAPs
Four (4) silos (ID #4.1 - 4.4), Two (2) day bins (ID #6.1 and 6.2), Silo dense phase transporter and SM 3/4 silica transporter	100.35	21.69	0.00	0.00	0.00	0.00	0.00	0.00
One (1) silo (ID #4.5) and Two (2) day bins (ID #7.1 and 7.2)	22.29	6.10	0.00	0.00	0.00	0.00	0.00	0.00

\* The limited potential to emit of PM and PM-10 are based on 326 IAC 2-2 (Prevention of Significant Deterioration), 326 IAC 6-2 (Particulate Emission Limitation for Sources of Indirect Heating) and 326 IAC 6-3 (Process Operations).

### County Attainment Status

The source is located in Harrison County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Harrison County has been designated as attainment or unclassifiable for ozone.

### Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

### Federal Rule Applicability

- sulfur
- (a) Boiler #1 is not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.4, Subpart Dc). This rule applies to steam generating units constructed after June 9, 1989, which have a maximum design heat input capacity between 10 and 100MMBtu/hr. The installation date of the Boiler #1 is before June 9, 1989, therefore, the New Source Performance Standard, 326 IAC 12, (40 CFR 60.4, Subpart Dc) does not apply.
  - (b) Boiler #2 is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.4, Subpart Dc) because the boiler was installed in 1991 and has a maximum heat input capacity of 20.922 MMBtu per hour. The SO<sub>2</sub> emissions from Boiler #2 shall not exceed five tenths (0.5) pounds per million Btu heat input, which is equivalent to the content of the fuel oil to be five-tenths percent (0.5%) by weight. Boiler #2 has a sulfur content of 0.4% by weight, therefore, Boiler #2 complies with New Source Performance Standard, 326 IAC 12, (40 CFR 60.4, Subpart Dc).
  - (c) The three (3) SM-3/4 tanks, Unit ID #11.1-11.3, each constructed in 1979, are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.4, Subpart Ka) because the storage capacity of each tank is less than 40,000 gallons.
  - (d) The three (3) SM-6 tanks, Unit ID# 11.4- 11.6, each constructed in 1991, are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.4, Subpart Kb) because the storage capacity of each tank is less than 40 cubic meters.
  - (e) The virgin oil tank, Unit ID # 11.7 is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110, Subpart Kb) because the storage capacity of the virgin oil tank is 60 cubic meter, which is greater than 40 cubic meters. Pursuant to Subpart Kb, each storage vessel with a design capacity of less than 75 cubic meters shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
  - (f) The degreasers are not subject to National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63.460, Subpart T (National Emission Standards for Halogenated Solvent Cleaning). The source does not use any halogenated solvent cleaners.

#### **State Rule Applicability - Entire Source**

##### **326 IAC 1-6-3 (Preventive Maintenance Plan)**

The source has submitted a Preventive Maintenance Plan (PMP) on May 31, 1996. This PMP has been verified to fulfill the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan).

##### **326 IAC 2-6 (Emission Reporting)**

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM, PM-10, and VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

##### **326 IAC 5-1 (Opacity Limitations)**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period, as determined in 326 IAC 5-1-4.

- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**326 IAC 6-4 (Fugitive Dust Emissions)**

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2(1), (2) or (3).

**State Rule Applicability - Individual Facilities**

**326 IAC 2-2 (Prevention of Significant Deterioration)**

This source is a major PSD source.

- (a) SM 3/4 production lines do not trigger PSD applicability. The VOC emissions from these facilities are less than 250 tons per year, utilizing a carbon adsorption system for VOC control. The PM and PM-10 emissions are also less than 250 tons per year, utilizing a bin filter. Any modification to this source which has the potential to emit of any of the criteria pollutants greater than the major modification thresholds, would be subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).
- (b) Pursuant to CP-061-1935-00012, issued on December 21, 1990, SM-6 production line does not trigger PSD applicability. The VOC emissions from this facility are less than 40 tons per year, utilizing a carbon adsorption system for VOC control. The PM emissions are less than 25 tons per year and the PM-10 emissions are less than 15 tons per year, utilizing a bin filter. These emissions are less than PSD thresholds.

**326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating)**

Pursuant to 326 IAC 6-2-3 (Emission Limitations for Sources of Indirect Heating), particulate emissions from Boiler #1 shall be limited by the following equation:

The one (1) boiler, Unit #1, with a maximum heat input capacity of 12.55 MMBtu per hour, constructed after June 8, 1972 and before September 21, 1983, is subject to 326 IAC 6-2-3. Pursuant to this rule, particulate emissions from indirect heating facilities existing and in operation after June 8, 1972 and before September 21, 1983, shall be limited by the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

$$Pt = \frac{50 \times 0.67 \times 28}{76.5 \times 12.55^{0.75} \times 1^{0.25}} = 1.84 \text{ lb/MMBtu}$$

The allowable particulate emission rate from the one (1) boiler, based on the above equation, is 1.84 pounds per MMBtu heat input. However, pursuant to 326 IAC 6-2-3(e), the allowable PM emission rate from any facility which began operation after June 8, 1972 and before September 21, 1983, shall in no case exceed 0.6 pounds per MMBtu heat input. Therefore, the allowable PM emission rate from the one (1) boiler is limited to 0.6 pounds per MMBtu heat input. The one (1) boiler has a potential PM emission rate of 0.02 pounds per MMBtu heat input, therefore, it will comply with 326 IAC 6-2-3 (see Appendix A, page 12 of 12, for detailed compliance calculations).

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)  
Pursuant to 326 IAC 6-2-4 (Emission Limitations for Sources of Indirect Heating),  
particulate emissions from Boiler #2 shall be limited by the following equation:

$$Pt = \frac{1.09}{Q^{0.26}} \quad \text{where: } Pt = \text{Pounds of particulate matter emitted per MMBtu heat input.}$$

$Q = \text{Total source maximum operating capacity rating in MMBtu per hour.}$   
 $Q = 33.48 \text{ MMBtu/hr}$

$$Pt = \frac{1.09}{(33.48)^{0.26}} = 0.44 \text{ pound per MMBtu heat input.}$$

Particulate matter emissions from Boiler #2 with a combined maximum heat input capacity of 33.48 MMBtu per hour shall not exceed 0.44 pounds per MMBtu heat input. The particulate matter emission from each of Boiler #2 is 0.02 pounds per MMBtu heat input, therefore, Boiler #2 will comply with 326 IAC 6-2-4.

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the five (5) silos, four (4) day bins, and two (2) transporters shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and}$$

$P = \text{process weight rate in tons per hour}$

- (a) The allowable particulate matter emissions from the four (4) silos (ID #4.1 - 4.4), two (2) day bins (ID #6.1 and 6.2), the silo dense phase transporter and the SM 3/4 silica transporter for SM-3 and SM-4 shall not exceed 22.91 pounds per hour.

$$E = 4.10 (13.04)^{0.67} \quad \text{where } P = 13.04 \text{ tons per hour}$$

$E = 22.91 \text{ pounds per hour}$

- (b) Pursuant to CP-061-1935-00012, issued on December 21, 1990, the allowable particulate matter emissions from the one (1) silo (ID #4.5) and two (2) day bins (ID #7.1 and 7.2) for SM-6 shall not exceed 5.09 pounds per hour.

$$E = 4.10 (1.38)^{0.67} \quad \text{where } P = 1.38 \text{ tons per hour}$$

$E = 5.09 \text{ pounds per hour}$

The bin filters shall be in operation at all times the five (5) silos, four (4) day bins, and two (2) transporters are in operation, in order to comply with this limit.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

Sulfur dioxide emissions from Boiler #2, with a maximum heat capacity of 20.92 MMBtu per hour and SO<sub>2</sub> emissions over 25 tons per year or 10 pounds per hour, shall be limited to five-tenths (0.5) pounds per million Btu heat input when burning No. 2 fuel oil. This equates to a fuel oil sulfur content limit of 0.4% (see Appendix A, page 4 of 12). Therefore, the sulfur content of the fuel must be less than or equal to 0.5% in order to comply with this rule.

326 IAC 7-2-1 (Sulfur Dioxide Reporting Requirements)

Boiler #2, with a maximum heat capacity of 20.92 MMBtu per hour, is subject to 326 IAC 7-2-1 (Reporting Requirements). This rule requires the source to submit to the Office of Air Management upon request reports of calendar month or annual average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate in pounds per million Btu.

**326 IAC 8-1-6 (New Facilities; General Reduction Requirements)**

SM-4 and SM-6 Lines are subject to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) because the facilities have potential to emit of VOC of more than 25 tons per year. Pursuant to CP-061-1935-00012, issued on December 21, 1990, a carbon adsorption unit with 95% control efficiency has been determined by OAM to be the Best Available Control Technology for SM-4 and SM-6.

**326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)**

This source is not subject to 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities) because the tanks do not store petroleum products and the tank capacities are less than 39,000 gallons.

**326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)**

Tanks containing trichloroethylene and miscella (ID #'s 11.1, 11.2, 11.4, and 11.5) are not subject to 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels). These tanks are located in Harrison County.

**Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The five (5) silos, four (4) day bins, and two (2) transporters have applicable compliance monitoring conditions as specified below:
  - (a) Daily visible emissions notations of the exhausts for the five (5) silos, four (4) day bins, and two (2) transporters shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

- (b) The Permittee shall record the total static pressure drop across the bin filters controlling the five (5) silos, four (4) day bins, and two (2) transporters, at least once daily when the five (5) silos, four (4) day bins, and two (2) transporters are in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the bin filters shall be maintained within the range of 1.0 to 7.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

These monitoring conditions are necessary because the bin filters for the five (5) silos, four (4) day bins, and two (2) transporters must operate properly to ensure compliance with 326 IAC 2-2 (Prevention of Significant Deterioration), 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

- 2. The extruders for SM-3, SM-4, and SM-6; oil extraction systems for SM-3, SM-4, and SM-6; aerosol addition systems for SM-3, SM-4, and SM-6; and tanks (ID # 11.1 through 11.6) have applicable compliance monitoring conditions as specified below:

- (a) The pressure drop across the carbon adsorption unit shall not be less than the pressure drop required to achieve the overall control efficiency of 95%, or a more appropriate pressure drop as determined by the most recent stack test data.
- (b) The carbon adsorption unit shall operate above the minimum operating temperature as determined by the most recent stack test data, which has been demonstrated to achieve the overall control efficiency of 95%.
- (c) The sensors and recording equipment measuring the pressure drop and temperature are operating.

These monitoring conditions are necessary because the carbon adsorber for the extruders for SM-3, SM-4, and SM-6; oil extraction systems for SM-3, SM-4, and SM-6; aerosol addition systems for SM-3, SM-4, and SM-6; and tanks (ID #'s 11.1 through 11.6) must operate properly to ensure compliance with 326 IAC 2-2 (Prevention of Significant Deterioration), 326 IAC 8-1-6 (New Facilities; General Reduction Requirements), and 326 IAC 2-7 (Part 70).

## **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

- (a) This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations. (Appendix A, Pages 1-13)

## **Conclusion**

The operation of this battery separator manufacturer shall be subject to the conditions of the attached proposed **Part 70 Permit No. T061-5983-00012**.

**Appendix A: Emission Calculations**  
**Conveying and Handling of Bulk Material**

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**Company Name:** Exide Corporation, Battery Separator Division  
**Address City IN Zip:** 3430 Cline Road, Corydon, IN 47112-8706  
**CP:** 061-5983  
**Pit ID:** 061-00012  
**Reviewer:** Yvette de los Angeles/EVP  
**Date:** 09/09/99

Process	Maximum Production tons/hr
Silo Dense Phase Trans.	7778.00
SM 3/4 Silica Trans.	150.00

		Pollutant	
		PM	PM10
* Emission Factor in lb/ton of material processed		0.10	0.03
Potential Emission in tons/yr	Silo Dense Phase Trans.	3406.76	1022.03
	SM 3/4 Silica Trans.	65.70	19.71
<b>Total Potential Emissions in ton/yr</b>		<b>3472.46</b>	<b>1041.74</b>
<b>Pollution Control Efficiency</b>		<b>99.00%</b>	
Controlled Emission in tons/yr	Silo Dense Phase Trans.	34.07	10.22
	SM 3/4 Silica Trans.	0.66	0.20
<b>Total Controlled Emissions in ton/yr</b>		<b>34.72</b>	<b>10.42</b>

Methodology:

\* Emission Factors submitted by the source for PM and PM-10.

Potential Emission (tons/yr) = Maximum Production (tons/hr) \* emission factor (lb/ton) \* (1 ton/2000 lb) \* (8760 hours/1 year)

Controlled Emission (tons/yr) = Potential Emissions (tons/yr) \* (1 - pollution control efficiency)

# Appendix A: Emissions Calculations

## Natural Gas Combustion Only

MM BTU/HR <100

### Small Industrial Boiler

**Company Name:** Exide Corporation, Battery Separator Division  
**Address City IN Zip:** 3430 Cline Road, Corydon, IN 47112-8706  
**CP:** 061-5983  
**Plt ID:** 061-00012  
**Reviewer:** Yvette de los Angeles/EVP  
**Date:** 09/09/99

	Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
Boiler #1	12.6	110.0
Boiler #2	20.9	183.3

		Pollutant				
Emission Factor in lb/MMCF		PM 7.6	PM10 7.6	SO2 0.6	NOx 100.0 *see below	VOC 5.5 CO 84.0
Potential Emission in tons/yr	Boiler #1 Boiler #2	0.4 0.7	0.4 0.7	0.0 0.1	5.5 9.2	0.3 0.5 4.6 7.7

## Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

PM emission factors are condensable and filterable.

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 2 for HAPs emissions calculations.



**Appendix A: Emissions Calculations**  
**Commercial/Institutional/Residential Combustors**  
**#1 and #2 Fuel Oil**

**Company Name:** Exide Corporation, Battery Separator Division  
**Address, City IN Zip:** 3430 Cline Road, Corydon, IN 47112-8706  
**CP:** 061-5983  
**Plt ID:** 061-00012  
**Reviewer:** Yvette de los Angeles/EVP  
**Date:** 09/09/99

	Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur 0.4 %
Boiler #1	12.553	785.459143	
Boiler #2	20.922	1309.11943	

Emission Factor in lb/kgal	Pollutant				
	PM	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
	3.3	56.8 (142.0S)	20.0	0.34	5.0
Potential Emission in tons/yr					
Boiler #1	1.3	22.3	7.9	0.1	2.0
Boiler #2	2.2	37.2	13.1	0.2	3.3

**Methodology**

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)

PM Emission Factor is Condensable and Filterable PM

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

See page 2 for HAPs emission calculations.

**Appendix A: Emissions Calculations**  
**Commercial/Institutional/Residential Combustors**  
**#1 and #2 Fuel Oil**  
**HAPs Emissions**

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**Company Name:** Exide Corporation, Battery Separator Division  
**Address, City IN Zip:** 3430 Cline Road, Corydon, IN 47112-8706  
**CP:** 061-5983  
**Plt ID:** 061-00012  
**Reviewer:** Yvette de los Angeles/EVP  
**Date:** 09/09/99

HAPs - Metals

Emission Factor in lb/mmBtu		Arsenic 4.0E-06	Beryllium 3.0E-06	Cadmium 3.0E-06	Chromium 3.0E-06	Lead 9.0E-06
Potential Emission in tons/yr	Boiler #1	0.0	0.0	0.0	0.0	0.0
	Boiler #2	0.0	0.0	0.0	0.0	0.0

HAPs - Metals (continued)

Emission Factor in lb/mmBtu		Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05
Potential Emission in tons/yr	Boiler #1	0.0	0.0	0.0	0.0
	Boiler #2	0.0	0.0	0.0	0.0

Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)\*Emission Factor (lb/mmBtu)\*8,760 hrs/yr / 2,000 lb/ton

**Appendix A: Emissions Calculations****Natural Gas Combustion Only****MM BTU/HR <100****Small Industrial Boiler****HAPs Emissions**

**Company Name:** Exide Corporation, Battery Separator Division  
**Address City IN Zip:** 3430 Cline Road, Corydon, IN 47112-8706  
**CP:** 061-5983  
**Plt ID:** 061-00012  
**Reviewer:** Yvette de los Angeles/EVP  
**Date:** 09/09/99

**HAPs - Organics**

Emission Factor in lb/MMcf		Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	Boiler #1	0.0	0.0	0.0	0.1	0.0
	Boiler #2	0.0	0.0	0.0	0.2	0.0

**HAPs - Metals**

Emission Factor in lb/MMcf		Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	Boiler #1	0.0	0.0	0.0	0.0	0.0
	Boiler #2	0.0	0.0	0.0	0.0	0.0

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations**  
**Commercial/Institutional/Residential Combustors**  
**#1 and #2 Fuel Oil**

**Company Name:** Exide Corporation, Battery Separator Division  
**Address, City IN Zip:** 3430 Cline Road, Corydon, IN 47112-8706  
**CP:** 061-5983  
**Plt ID:** 061-00012  
**Reviewer:** Yvette de los Angeles/EVP  
**Date:** 09/09/99

	Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur 0.4 %
Boiler #1	12.553	785.459143	
Boiler #2	20.922	1309.11943	

Emission Factor in lb/kgal	Pollutant				
	PM	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
	3.3	56.8 (142.0S)	20.0	0.34	5.0
Potential Emission in tons/yr					
Boiler #1	1.3	22.3	7.9	0.1	2.0
Boiler #2	2.2	37.2	13.1	0.2	3.3

### Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)

PM Emission Factor is Condensable and Filterable PM

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

See page 2 for HAPs emission calculations.

**Appendix A: Emissions Calculations**  
**Commercial/Institutional/Residential Combustors**  
**#1 and #2 Fuel Oil**  
**HAPs Emissions**

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**Company Name:** Exide Corporation, Battery Separator Division  
**Address, City IN Zip:** 3430 Cline Road, Corydon, IN 47112-8706  
**CP:** 061-5983  
**Plt ID:** 061-00012  
**Reviewer:** Yvette de los Angeles/EVP  
**Date:** 09/09/99

HAPs - Metals

Emission Factor in lb/mmBtu		Arsenic 4.0E-06	Beryllium 3.0E-06	Cadmium 3.0E-06	Chromium 3.0E-06	Lead 9.0E-06
Potential Emission in tons/yr	Boiler #1	0.0	0.0	0.0	0.0	0.0
	Boiler #2	0.0	0.0	0.0	0.0	0.0

HAPs - Metals (continued)

Emission Factor in lb/mmBtu		Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05
Potential Emission in tons/yr	Boiler #1	0.0	0.0	0.0	0.0
	Boiler #2	0.0	0.0	0.0	0.0

Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)\*Emission Factor (lb/mmBtu)\*8,760 hrs/yr / 2,000 lb/ton

# Appendix A: Emissions Calculations

## Natural Gas Combustion Only

MM BTU/HR <100

### Small Industrial Boiler

**Company Name:** Exide Corporation, Battery Separator Division  
**Address City IN Zip:** 3430 Cline Road, Corydon, IN 47112-8706  
**CP:** 061-5983  
**Plt ID:** 061-00012  
**Reviewer:** Yvette de los Angeles/EVP  
**Date:** 09/09/99

	Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
Boiler #1	12.6	110.0
Boiler #2	20.9	183.3

		Pollutant				
Emission Factor in lb/MMCF		PM 7.6	PM10 7.6	SO2 0.6	NOx 100.0 *see below	VOC 5.5 CO 84.0
Potential Emission in tons/yr	Boiler #1 Boiler #2	0.4 0.7	0.4 0.7	0.0 0.1	5.5 9.2	0.3 0.5 4.6 7.7

## Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

PM emission factors are condensable and filterable.

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations****Natural Gas Combustion Only****MM BTU/HR <100****Small Industrial Boiler****HAPs Emissions**

**Company Name:** Exide Corporation, Battery Separator Division  
**Address City IN Zip:** 3430 Cline Road, Corydon, IN 47112-8706  
**CP:** 061-5983  
**Plt ID:** 061-00012  
**Reviewer:** Yvette de los Angeles/EVP  
**Date:** 09/09/99

**HAPs - Organics**

Emission Factor in lb/MMcf		Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	Boiler #1	0.0	0.0	0.0	0.1	0.0
	Boiler #2	0.0	0.0	0.0	0.2	0.0

**HAPs - Metals**

Emission Factor in lb/MMcf		Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	Boiler #1	0.0	0.0	0.0	0.0	0.0
	Boiler #2	0.0	0.0	0.0	0.0	0.0

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Process Particulate Emissions**

**Company Name:** Exide Corporation, Battery Separator Division  
**Address City IN Zip:** 3430 Cline Road, Corydon, IN 47112-8706  
**CP:** 061-5983  
**Plt ID:** 061-00012  
**Reviewer:** Yvette de los Angeles/EVP  
**Date:** 09/09/99

<b>Potential Emissions (tons/year)</b>						
<b>A. Baghouses</b>						
Process	No. of Units	Grain Loading per Actual Cubic Foot of Outlet Air	Air to Cloth Ratio Air Flow (acfm/ft <sup>2</sup> )	Total Filter Area (ft <sup>2</sup> )	Control Efficiency	Total (tons/yr)
Silo Dense Phase Transporter	1	0.02000	3.7	335	99.00%	93.07
SM 3/4 Silica Transporter	1	0.02000	2.6	516	99.00%	100.73
Total Emissions Based on Rated Capacity at 8,760 Hours/Year						<b>193.80</b>
<b>Controlled Emissions (tons/year)</b>						
<b>A. Baghouses</b>						
Process	No. of Units	Grain Loading per Actual Cubic Foot of Outlet Air	Air to Cloth Ratio Air Flow (acfm/ft <sup>2</sup> )	Total Filter Area (ft <sup>2</sup> )	Control Efficiency	Total (tons/yr)
Silo Dense Phase Transporter	1	0.02000	3.7	335	99.00%	0.93
SM 3/4 Silica Transporter	1	0.02000	2.6	516	99.00%	1.01
Total Emissions Based on Rated Capacity at 8,760 Hours/Year and source controls						<b>1.94</b>

Methodology:State Potential (uncontrolled):

Baghouse (tons/yr) = No. Units \* Loading (grains/acf) \* Air/Cloth Ratio (acfm/ft<sup>2</sup>) \* Filter Area (ft<sup>2</sup>) \* 1 lb/7,000 grains \* 60 min/hr \* 8760 hr/yr \* 1 ton/2,000 lbs \* 1/(1-C

Federal Potential (controlled):

Baghouse (tons/yr) = No. Units \* Loading (grains/acf) \* Air/Cloth Ratio (acfm/ft<sup>2</sup>) \* Filter Area (ft<sup>2</sup>) \* 1 lb/7,000 grains \* 60 min/hr \* 8760 hr/yr \* 1 ton/2,000 lbs \* 1/(1-C



**Appendix A: Process Particulate Emissions**

**Company Name:** Exide Corporation, Battery Separator Division  
**Address City IN Zip:** 3430 Cline Road, Corydon, IN 47112-8706  
**CP:** 061-5983  
**Pit ID:** 061-00012  
**Reviewer:** Yvette de los Angeles/EVP  
**Date:** 09/09/99

<b>Potential Emissions (tons/year)</b>						
<b>A. Baghouses</b>						
Process	No. of Units	Grain Loading per Actual Cubic Foot of Outlet Air	Air to Cloth Ratio Air Flow (acfm/ft <sup>2</sup> )	Total Filter Area (ft <sup>2</sup> )	Control Efficiency	Total (tons/yr)
Silo Dense Phase Transporter	1	0.02000	3.7	335	99.00%	93.07
SM 3/4 Silica Transporter	1	0.02000	2.6	516	99.00%	100.73
Total Emissions Based on Rated Capacity at 8,760 Hours/Year						<b>193.80</b>
<b>Controlled Emissions (tons/year)</b>						
<b>A. Baghouses</b>						
Process	No. of Units	Grain Loading per Actual Cubic Foot of Outlet Air	Air to Cloth Ratio Air Flow (acfm/ft <sup>2</sup> )	Total Filter Area (ft <sup>2</sup> )	Control Efficiency	Total (tons/yr)
Silo Dense Phase Transporter	1	0.02000	3.7	335	99.00%	0.93
SM 3/4 Silica Transporter	1	0.02000	2.6	516	99.00%	1.01
Total Emissions Based on Rated Capacity at 8,760 Hours/Year and source controls						<b>1.94</b>

Methodology:State Potential (uncontrolled):

Baghouse (tons/yr) = No. Units \* Loading (grains/acf) \* Air/Cloth Ratio (acfm/ft<sup>2</sup>) \* Filter Area (ft<sup>2</sup>) \* 1 lb/7,000 grains \* 60 min/hr \* 8760 hr/yr \* 1 ton/2,000 lbs \* 1/(1-C

Federal Potential (controlled):

Baghouse (tons/yr) = No. Units \* Loading (grains/acf) \* Air/Cloth Ratio (acfm/ft<sup>2</sup>) \* Filter Area (ft<sup>2</sup>) \* 1 lb/7,000 grains \* 60 min/hr \* 8760 hr/yr \* 1 ton/2,000 lbs \* 1/(1-C

**Appendix A: Emission Calculations**  
**Tank HAP Emissions - Maximum PTE**

**Company Name:** Exide Corporation, Battery Separator Division  
**Address City IN Zip:** 3430 Cline Road, Corydon, IN 47112-8706  
**Title V:** 061-5983-00012  
**Reviewer:** Yvette de los Angeles/EVP  
**Date:** 09/09/99

Tank Number	Tank ID Number	Outdoor/ Indoor	Product Stored	** Hazardous Air Pollutants (in tons per year)		
				Trichloroethylene	Total (Uncontrolled)	Total (Controlled)
1	SM 3/4 TCE	Outdoor	Trichloroethylene	1.35	1.35	0.07
2	SM 3/4 Miscella	Outdoor	Miscella	0.75	0.75	0.04
3	SM 3/4 Oil	Outdoor	Oil	---	0.00	0.00
4	SM 6 TCE	Outdoor	Trichloroethylene	1.31	1.31	0.07
5	SM 6 Miscella	Outdoor	Miscella	1.04	1.04	0.05
6	SM 6 Process Oil	Outdoor	Process Oil	---	0.00	0.00
7	Virgin Oil	Outdoor	Virgin Oil	---	0.00	0.00
<b>Total HAP (tons per year)</b>				<b>4.45</b>	<b>4.45</b>	<b>0.22</b>

Note: All storage tank emissions estimated using EPA's TANKS 3.0 software program.

VOC Emissions are controlled by carbon adsorption with a control efficiency of 95%.

**Appendix A: Emission Calculations  
Storage for Polyethylene and Silica**

**Company Name:** Exide Corporation, Battery Separator Division  
**Address City IN Zip:** 3430 Cline Road, Corydon, IN 47112-8706  
**CP:** 061-5983  
**Plt ID:** 061-00012  
**Reviewer:** Yvette de los Angeles/EVP  
**Date:** 09/09/99

Process	Maximum Production tons/hr	Material stored
SILO 01	15556.00	polyethylene
SILO 02	15556.00	polyethylene
SILO 03	7778.00	silica
SILO 04	7778.00	silica
SILO 05	7778.00	silica
SM 3/4 Day Bin	1500.00	silica
SM 3/4 Day Bin	500.00	polyethylene
SM 6 Day Bin	1500.00	silica
SM 6 Day Bin	500.00	polyethylene

	Polyethylene		Silica	
	Pollutant		Pollutant	
Emission Factor in lb/ton of material processed	PM 0.05	PM10 0.0005	PM 0.05	PM10 0.0150
Potential Emission in tons/yr				
SILO 01	3406.76	34.07		
SILO 02	3406.76	34.07		
SILO 03			1703.38	511.01
SILO 04			1703.38	511.01
SILO 05			1703.38	511.01
SM 3/4 Day Bin			328.50	98.55
SM 3/4 Day Bin	109.50	1.10		
SM 6 Day Bin			328.50	98.55
SM 6 Day Bin	109.50	1.10		
<b>Total Potential Emissions in ton/yr</b>	<b>7032.53</b>	<b>70.33</b>	<b>5767.15</b>	<b>1730.14</b>
<b>Pollution Control Efficiency (PE) 99.90%</b>				
<b>Pollution Control Efficiency (Silica) 99.00%</b>				
Controlled Emission in tons/yr				
SILO 01	3.41	0.03		
SILO 02	3.41	0.03		
SILO 03			17.03	5.11
SILO 04			17.03	5.11
SILO 05			17.03	5.11
SM 3/4 Day Bin			3.28	0.99
SM 3/4 Day Bin	0.11	0.00		
SM 6 Day Bin			3.28	0.99
SM 6 Day Bin	0.11	0.00		
<b>Total Controlled Emissions in ton/yr</b>	<b>7.03</b>	<b>0.07</b>	<b>57.67</b>	<b>17.30</b>

Methodology:

Emission Factors submitted by the source for PM and PM-10.

Potential Emission (tons/yr) = Maximum Production (tons/hr) \* emission factor (lb/ton) \* (1 ton/2000 lb) \* (8760 hours/1 year)

Controlled Emission (tons/yr) = Potential Emissions (tons/yr) \* (1 - pollution control efficiency)

**Appendix A: Emission Calculations  
Storage for Polyethylene and Silica**

**Company Name:** Exide Corporation, Battery Separator Division  
**Address City IN Zip:** 3430 Cline Road, Corydon, IN 47112-8706  
**CP:** 061-5983  
**Plt ID:** 061-00012  
**Reviewer:** Yvette de los Angeles/EVP  
**Date:** 09/09/99

Process	Maximum Production tons/hr	Material stored
SILO 01	15556.00	polyethylene
SILO 02	15556.00	polyethylene
SILO 03	7778.00	silica
SILO 04	7778.00	silica
SILO 05	7778.00	silica
SM 3/4 Day Bin	1500.00	silica
SM 3/4 Day Bin	500.00	polyethylene
SM 6 Day Bin	1500.00	silica
SM 6 Day Bin	500.00	polyethylene

	Polyethylene		Silica	
	Pollutant		Pollutant	
Emission Factor in lb/ton of material processed	PM 0.05	PM10 0.0005	PM 0.05	PM10 0.0150
Potential Emission in tons/yr				
SILO 01	3406.76	34.07		
SILO 02	3406.76	34.07		
SILO 03			1703.38	511.01
SILO 04			1703.38	511.01
SILO 05			1703.38	511.01
SM 3/4 Day Bin			328.50	98.55
SM 3/4 Day Bin	109.50	1.10		
SM 6 Day Bin			328.50	98.55
SM 6 Day Bin	109.50	1.10		
<b>Total Potential Emissions in ton/yr</b>	<b>7032.53</b>	<b>70.33</b>	<b>5767.15</b>	<b>1730.14</b>
<b>Pollution Control Efficiency (PE) 99.90%</b>				
<b>Pollution Control Efficiency (Silica) 99.00%</b>				
Controlled Emission in tons/yr				
SILO 01	3.41	0.03		
SILO 02	3.41	0.03		
SILO 03			17.03	5.11
SILO 04			17.03	5.11
SILO 05			17.03	5.11
SM 3/4 Day Bin			3.28	0.99
SM 3/4 Day Bin	0.11	0.00		
SM 6 Day Bin			3.28	0.99
SM 6 Day Bin	0.11	0.00		
<b>Total Controlled Emissions in ton/yr</b>	<b>7.03</b>	<b>0.07</b>	<b>57.67</b>	<b>17.30</b>

Methodology:

Emission Factors submitted by the source for PM and PM-10.

Potential Emission (tons/yr) = Maximum Production (tons/hr) \* emission factor (lb/ton) \* (1 ton/2000 lb) \* (8760 hours/1 year)

Controlled Emission (tons/yr) = Potential Emissions (tons/yr) \* (1 - pollution control efficiency)

**Appendix A: Emission Calculations**  
**Tank VOC Emissions - Maximum PTE**

**Company Name:** Exide Corporation, Battery Separator Division  
**Address City IN Zip:** 3430 Cline Road, Corydon, IN 47112-8706  
**Title V:** 061-5983-00012  
**Reviewer:** Yvette de los Angeles/EVP  
**Date:** 09/09/99

Tank Number	Tank ID Number	Outdoor/ Indoor	Product Stored	Losses (Tons per Year)		Total VOC (Uncontrolled)	Total VOC (Controlled)
				Standing	Working	Tons/yr	Tons/yr
1	SM 3/4 TCE	Outdoor	Trichloroethylene	0.02	1.33	1.35	0.07
2	SM 3/4 Miscella	Outdoor	Miscella	0.01	0.73	0.75	0.04
3	SM 3/4 Oil	Outdoor	Oil	0.0001	0.01	0.01	0.00
4	SM 6 TCE	Outdoor	Trichloroethylene	0.01	1.29	1.31	0.07
5	SM 6 Miscella	Outdoor	Miscella	0.01	1.03	1.04	0.05
6	SM 6 Process Oil	Outdoor	Process Oil	0.00	0.00	0.00	0.00
7	Virgin Oil	Outdoor	Virgin Oil	0.00	0.00	0.00	0.00
<b>Total VOC</b>				<b>0.07</b>	<b>4.38</b>	<b>4.45</b>	<b>0.22</b>

Note: All storage tank emissions estimated using EPA's TANKS 3.0 software program.

VOC Emissions will be controlled by carbon adsorption with a control efficiency of 95%.

**Appendix A: Emission Calculations**  
**VOC and TCE Emissions from Extruders, Oil Extraction Systems, and Aerosol Surfactants**

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**Company Name:** Exide Corporation, Battery Separator Division  
**Address City IN Zip:** 3430 Cline Road, Corydon, IN 47112-8706  
**CP:** 061-5983  
**Plt ID:** 061-00012  
**Reviewer:** Yvette de los Angeles/EVP  
**Date:** 09/09/99

Process	Control Efficiency (from Carbon Adsorption)	Uncontrolled Potential VOC Emissions (tons/year)	Controlled Potential VOC Emissions (tons/year)	Uncontrolled Potential TCE Emissions (tons/year)	Controlled Potential TCE Emissions (tons/year)
SM 3 Extruder	0.00%	10.40	10.40		
SM 4 Extruder	0.00%	10.40	10.40		
SM 6 Extruder	0.00%	17.50	17.50		
SM 3 Oil Extractor	95.00%	646.00	32.30	646.00	32.30
SM 4 Oil Extractor	95.00%	646.00	32.30	646.00	32.30
SM 6 Oil Extractor	95.00%	1094.00	54.70	1094.00	54.70
SM 3 Aerosol Addition System	0.00%	2.10	2.10		
SM 4 Aerosol Addition System	0.00%	2.10	2.10		
SM 6 Aerosol Addition System	0.00%	3.50	3.50		
<b>TOTAL VOC EMISSIONS</b>		<b>2432.00</b>	<b>165.30</b>	<b>2386.00</b>	<b>119.30</b>

Methodology:

Potential VOC Emissions are submitted by the source.

The extruder and aerosol surfactant emissions are based on mass balance.

The oil extraction emissions are based on 1994 stack tests.